In the claims:

1. (Currently Amended) A local area network adapted to supply power to powered devices over a plurality of paths thus supplying high power, the local area network comprising:

at least one powered device;

a hub adapted for communicating data to and from said at least one powered device;

a communication cabling connecting said at least one powered device to said hub, said communication cabling comprising a first set of wire pairs utilized for communicating data between said at least one powered device and said hub and a second set of wire pairs different from said first set of wire pairs;

a first direct current power source adapted to supply and return a first direct current power over said first set of wire pairs;

a second direct current power source adapted to supply and return a second direct current power over said second set of wire pairs; and

a combiner operative to:

receive said first power over said at least a portion of said first set of wire pairs;

receive said second power over said at least a portion of said second set of wire pairs;

combine the current of said received first power and the current of said received second power to a combined high power output; ~~and~~

transmit a signal to at least one of said first power source and said second power source, said signal indicating that said combiner is operative to produce said combined high power output; and

maintain a near even balance between the current of said received first power and the current of said received second power.

2. (Previously Presented) A local area network according to claim 1, wherein said combiner comprises a control circuit operative to sense the successful operation of said combiner, said control circuit supplying said combined high power output to said at least one powered device in response to said sensed successful operation of said combiner.

3. (Original) A local area network according to claim 2, wherein said control circuit is a controller.

4. (Previously Presented) A local area network according to claim 2, wherein said first power source and said second power source are associated with midspan power insertion equipment.

5. (Previously Presented) A local area network according to claim 4, wherein the output of said first power source is electrically isolated from the output of said second power source.

6. (Previously Presented) A local area network according to claim 4, wherein the output of said first power source is not electrically isolated from the output of said second power source.

7. (Cancelled)

8. (Cancelled)

9. (Original) A local area network according to claim 1, wherein said second set of wires are utilized for communicating data between said at least one powered device and said hub.

10. (Previously Presented) A local area network according to claim 1, wherein at least one of said first power source and said second power source are associated with midspan power insertion equipment.

11. (Previously Presented) A local area network according to claim 10, wherein said midspan power insertion equipment conforms to the IEEE 802.3af-2003 standard.

12. (Previously Presented) A local area network according to claim 1, wherein at least one of said first power source and said second power source are associated with said hub.

13. (Previously Presented) A local area network according to claim 12, wherein said at least one of said first power source and said second power source associated with said hub conforms to the IEEE 802.3af-2003 standard.

14. (Previously Presented) A local area network according to claim 1, wherein said first power source is associated with said hub, and said second power source is associated with midspan power insertion equipment.

15. (Previously Presented) A local area network according to claim 1, wherein said first power source and said second power source are associated with midspan power insertion equipment.

16. (Previously Presented) A local area network according to claim 1, wherein said first power source and said second power source are associated with said hub.

17. (Previously Presented) A local area network according to claim 1, wherein said hub adapted for communicating data to and from said at least one powered device operates according to at least one of 10 Base-T, 100 Base-T and 1000 Base-T.

18. (Cancelled)

19. (Currently Amended) A local area network according to ~~claim 18~~ claim 1, wherein said transmitted signal comprises a change in ~~the class~~ a class identification.

20. (Original) A local area network according to claim 1, wherein said combined high power output is supplied to a load.

21. (Cancelled)

22. (Original) A local area network according to claim 20, wherein said load comprises at least one of: a wireless access point; a laptop computer; a desk top computer; a security camera having at least one of pan, tilt and zoom functionality; and an entrance control device.

23. (Original) A local area network according to claim 20, wherein said combiner is located within said load.

24. (Currently Amended) A local area network according to claim 20, wherein said load is operative alternately in a low power mode and a high power mode, said mode selection responsive to a mode signal from said combiner.

25. (Previously Presented) A local area network according to claim 24, wherein said combiner is further operative to supply low power to said load for operation of said load in said low power mode in the absence of said combined high power.

26. (Cancelled)

27. (Currently Amended) A combiner for use with a powered device having high power needs, the combiner comprising:

a first power input adapted to receive a first power signal over a first set of twisted wire pairs utilized to carry communication data;

a second power input adapted to receive a second power signal over a second set of twisted wire pairs different from said first set; and

a circuitry arranged to combine the current of said received first power signal with the current of said received second power signal to produce a combined high power signal; and

a control circuit operative to:

maintain a near even balance between the current of said received first power and the current of said received second power;

sense said combined high power signal; ~~and~~

supply said combined high power signal to a powered device in response to said sensed combined high power ~~signal~~ signal; and

in the absence of said combined high power signal, supply a low power signal to the powered device and transmit a mode signal to the powered device indicative of said supplied low power signal, the powered device operative alternately in a low power mode and a high power mode, the mode selection responsive to said mode signal.

28. (Cancelled)

29. (Original) A combiner according to claim 27, wherein said powered device comprises at least one of: a wireless access point; a laptop computer; a desk top computer; a security camera having at least one of pan, tilt and zoom functionality; and an entrance control device.

30. (Original) A combiner according to claim 27, wherein said combiner is located within said powered device.

31. (Original) A combiner according to claim 27, wherein said combiner is located outside of said powered device.

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Original) A combiner according to claim 27, wherein said control circuit is a controller.

36. (Previously Presented) A combiner according to claim 27, wherein said circuitry arranged to combine comprises at least one DC/DC converter.

37. (Previously Presented) A combiner according to claim 27, wherein said circuitry arranged to combine comprises a first DC/DC converter associated with said first power input and a second DC/DC converter associated with said second power input.

38. (Original) A combiner according to claim 37, wherein said first DC/DC converter is connected in series with said second DC/DC converter.

39. (Original) A combiner according to claim 37, wherein said first DC/DC converter is connected in parallel with said second DC/DC converter.

40. (Previously Presented) A combiner according to claim 37, wherein said circuitry arranged to combine further comprises a first PWM/resonance controller associated with said first DC/DC converter and a second PWM/resonance controller associated with said second DC/DC converter.

41. (Previously Presented) A combiner according to claim 27, wherein said circuitry arranged to combine further comprises a transformer having a first primary associated with said first power input and a second primary associated with said second power input.

42. (Original) A combiner according to claim 41, wherein said transformer comprises a secondary associated with said combined high power.

43. (Currently Amended) A method of supplying power to a powered device comprising the steps of:

a) receiving a first power signal over a first set of twisted wire pairs;

b) receiving a second power signal over a second set of twisted wire pairs different from said first set;

c) combining the current of said received first power signal and the current of said received second power signal into a combined high power output;

d) sensing the success of said combining of said received first power signal and said received second power signal;

e) enabling said combined high power output in response to said ~~sensing~~ sensed success of said combining; ~~and~~

f) maintaining, in the event of said sensed success of said combining, a near even balance between the current of said received first power signal and the current of said second received power signal;

g) sensing an unsuccessful combining of said received first power signal and said received second power signal;

h) comparing at least one of said first and said second received power signal to a reference; and

i) supplying low power from one of said received first power signal and said received second power signal in response to said comparing.

44. (Cancelled)

45. (Currently Amended) A method of supplying power to a powered device according to ~~claim 44~~ claim 43, further comprising the step of:

j) transmitting a mode signal to ~~signaling~~ the powered device of said supplied low power, the powered device operative in one of a high power mode and a low power mode responsive to said transmitted mode signal.

46. (Previously Presented) A method of supplying power to a powered device according to claim 43, further comprising the step of:

j) transmitting a signal to at least one of the source of said received first power signal and the source of said received second power signal, said transmitted signal notifying said at least one of the source of said received first power signal and the source of said received second power signal of said combining.

47. (Currently Amended) A method of supplying power to a powered device according to claim 46, wherein said transmitting a signal comprises changing ~~the classification~~ a classification identification.

48. (Currently Amended) A local area network according to claim 1, wherein said combiner comprises:

a first current sensor arranged to sense the current component of said received first power;

a second current sensor arranged to sense the current component of said received second power; and

a current share circuit in communication with said first current sensor and said second sensor, said current share circuit ~~being~~ operative to maintain said near even balance.

49. (Previously Presented) A local area network according to claim 1, wherein said current share circuit is implemented in a controller.

50. (Currently Amended) A combiner according to claim 27, further comprising:

a first current sensor arranged to sense the current component of said received first power; and

a second current sensor arranged to sense the current component of said received second ~~power; and~~ power,

wherein said control circuit comprises a current share circuit in communication with said first current sensor and said second sensor, said current share circuit ~~being~~ operative to maintain said near even balance.

51. (New) A local area network adapted to supply power to powered devices over a plurality of paths thus supplying high power, the local area network comprising:

at least one powered device;

a hub adapted for communicating data to and from said at least one powered device;

a communication cabling connecting said at least one powered device to said hub, said communication cabling comprising a first set of wire pairs utilized for communicating data between said at least one powered device and said hub and a second set of wire pairs different from said first set of wire pairs;

a first direct current power source adapted to supply and return a first direct current power over said first set of wire pairs;

a second direct current power source adapted to supply and return a second direct current power over said second set of wire pairs;

a combiner; and

a load,

said combiner operative to:

receive said first power over said at least a portion of said first set of wire pairs;

receive said second power over said at least a portion of said second set of wire pairs;

combine the current of said received first power and the current of said received second power to a combined high power output;

supply said combined high power output to said load;

supply low power to said load for operation of said load in said low power mode in the absence of said combined high power; and

signal said load of said low power supply operation,

wherein said load is operative alternately in a low power mode and a high power mode, said mode selection responsive to said signal of said combiner.

52. (New) A local area network according to claim 51, wherein said combiner is operative to transmit a signal to at least one of said first direct current power source and said second direct current power source, said signal indicating that said combiner is operative to produce said high power output.

53. (New) A local area network according to claim 52, wherein said transmitted signal comprises a change in a class identification.

54. (New) A combiner for use with a powered device having high power needs, the combiner comprising:

a first power input adapted to receive a first power signal from a first power source over a first set of twisted wire pairs utilized to carry communication data;

a second power input adapted to receive a second power signal from a second power source over a second set of twisted wire pairs different from said first set; and

a circuitry arranged to combine the current of said received first power signal with the current of said received second power signal to produce a combined high power signal; and

a control circuit operative to:

sense said combined high power signal;

supply said combined high power signal to a powered device in response to said sensed combined high power signal; and

transmit a signal to at least one of the first power source and the second power source, said transmitted signal indicating that the combiner is operative to supply said combined high power signal.

55. (New) A combiner according to claim 54, wherein said control circuit is further operative in the absence of said combined high power signal, to:

supply a low power signal to the powered device; and

transmit a mode signal to the powered device indicative of said supplied low power signal,

the powered device operative alternately in a low power mode and a high power mode, the mode selection responsive to said transmitted mode signal.

56. (New) A method of supplying power to a powered device, the method comprising:

a) receiving a first power signal over a first set of twisted wire pairs;

b) receiving a second power signal over a second set of twisted wire pairs different from said first set;

c) combining the current of said received first power signal and the current of said received second power signal into a combined high power output;

d) sensing the success of said combining of said received first power signal and said received second power signal;

e) supplying said combined high power output to a powered device in response to said sensed success of said combining;

g) sensing an unsuccessful combining of said received first power signal and said received second power signal;

h) supplying low power from one of said received first power signal and said received second power signal to the powered device in response to said sensed unsuccessful combining; and

i) transmitting a mode signal to the powered device indicative of the status of said combining, the powered device operative in one of a high power mode and a low power mode responsive to said transmitted mode signal.

57. (New) A method according to claim 56, further comprising:

j) transmitting a signal to at least one of the source of said received first power signal and the source of said received second power signal, said transmitted signal notifying said at least one of the source of said received first power signal and the source of said received second power signal of said combining.

58. (New) A method of supplying power to a powered device comprising the steps of:

a) receiving a first power signal over a first set of twisted wire pairs;

b) receiving a second power signal over a second set of twisted wire pairs different from said first set;

c) combining the current of said received first power signal and the current of said received second power signal into a combined high power output;

d) sensing the success of said combining of said received first power signal and said received second power signal;

e) supplying said combined high power output to a powered device in response to said sensed success of said combining; and

f) transmitting a signal to at least one of the source of said received first power signal and the source of said received second power signal, said transmitted signal notifying said at least one of the source of said received first power signal and the source of said received second power signal of said combining.

59. (New) A method according to claim 58, further comprising:

g) sensing an unsuccessful combining of said received first power signal and said received second power signal;

h) supplying low power from one of said received first power signal and said received second power signal to the powered device in response to said sensed unsuccessful combining; and

i) transmitting a mode signal to the powered device indicative of the status of said combining, the powered device operative in one of a high power mode and a low power mode responsive to said transmitted mode signal.